

**MEAP**

MICHIGAN  
EDUCATIONAL  
ASSESSMENT  
PROGRAM

**Grade 5  
Science**

*Released Items*

*Winter 2003*

Use the information below to answer questions 5 through 7.



Bald eagles are often called birds of prey because they hunt other animals for food.

- 5 Bald eagles have many different traits that help them hunt for food. Which of the following is **NOT** a physical trait that helps these eagles hunt?
- A sharp claws
  - B color of legs
  - C good eyesight
  - D a sharp, hooked beak
- 6 Fish are the bald eagle's main food source. Which of the following **BEST** describes the relationship between the bald eagle and the fish?
- A The fish needs the eagle.
  - B They help each other.
  - C producer-consumer
  - D predator-prey



Bald Eagle



Pheasant



Mallard Duck



Cardinal



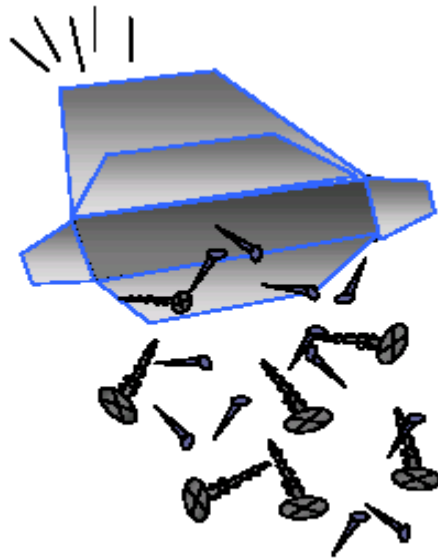
Hawk

- 7 The birds shown above are all found in Michigan. Examine the beaks of these birds and compare them with the bald eagle. Which one of them can **MOST LIKELY** be classified as a bird of prey?

- A hawk
- B cardinal
- C pheasant
- D mallard duck

Use the following information to answer questions 17 through 20.

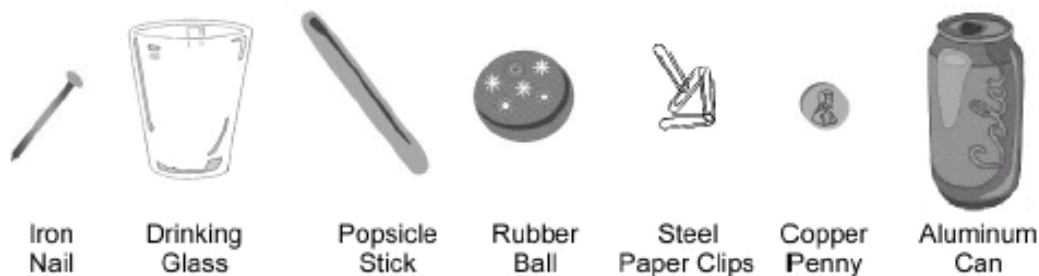
Pablo helps his dad in the garage after school. One afternoon he accidentally dropped a box of screws and nails onto the floor. His dad grabbed a tool from the workbench and passed it over the spilled screws and nails. Most of them jumped up and stuck to the tool. He pulled them off and put them back in the box.



- 17 What caused the screws and nails to jump from the floor and stick to the tool that Pablo's dad was holding?
- A the force of friction
  - B gravitational pull
  - C a magnetic force
  - D a static charge

- 18** The box contained different types of screws and nails. Which of them did Pablo have to pick up with his fingers after his dad finished?
- A** iron nails
  - B** iron screws
  - C** steel screws
  - D** aluminum nails
- 19** Pablo asked his dad why the tool didn't pick up all of the nails and screws. What was his dad's response?
- A** Only screws have gravitational properties.
  - B** All screws and nails have gravitational properties.
  - C** Only sharp screws and nails have magnetic properties.
  - D** Not all metals have magnetic properties.

- 20** Pablo takes the tool from his father's workbench. He takes turns holding it to the following objects.



- Divide the objects into two groups: those that will be attracted to the tool and those that will **NOT** be attracted to the tool.
- What property causes some objects to be attracted to the tool?

**ANSWER THIS ITEM IN YOUR ANSWER FOLDER.  
NOTHING WRITTEN IN THE SPACE BELOW WILL BE SCORED.**

**MEAP Grade 5 Science Winter 2003****#20 Constructed Response Scoring Rubric****Acceptable Responses:**

Attracted: Iron nail, steel paper clips

Not attracted: glass jar, popsicle stick, rubber ball, copper penny, aluminum can

Correct statement: The property is magnetism **or** magnetic force **or** iron and/or steel.

**Scoring Guide**

3 points = Two correct groups and a correct statement.

2 points = Two groups with one missing or misplaced object and a correct statement.

**OR**

Two correct groups and a missing or incorrect statement.

1 point = Two groups with two missing or misplaced items with a correct statement.

**OR**

Two groups with one missing or misplaced item and a missing or incorrect statement.

**OR**

A correct statement only.

**OR**

Two correct but **unlabeled** groups in **reverse order** and a missing or incorrect statement.

0 points = Two groups with two or more incorrect or misplaced items and a missing or incorrect statement.

**OR**

Only one group given.

3 points

- 20 Divide the objects into two groups: those that will be attracted to the tool and those that will **NOT** be attracted to the tool.

The things that will be attracted to the magnetic tool are: an iron nail and the steel paper clips. The things that won't be attracted to the tool are: glass jar, popside stick, rubber ball, copper penny, and aluminum can.

What property causes some objects to be attracted to the tool?

A property that causes some objects to be attracted to the magnetic tool is steel.

Score Point: 3

This response provides two correct groups and a correct statement (A property that causes some objects to be attracted to the magnetic tool is steel.).



3 points

- 20 Divide the objects into two groups: those that will be attracted to the tool and those that will NOT be attracted to the tool.

① The iron nail, paper clips can be attracted to the magnet.

② The glass jar, popsicle stick, rubber ball, copper penny, aluminum can are not attracted to the magnet.

What property causes some objects to be attracted to the tool?

Score Point: 2

This response provides two correct groups but is missing a statement.

3 points

- 20 Divide the objects into two groups: those that will be attracted to the tool and those that will NOT be attracted to the tool.

1 Iron nail, steel paper clip, and copper penny  
2 Glass jar, popsicle stick, rubber ball, and Aluminum can.

What property causes some objects to be attracted to the tool?

Score Point: 1

This response provides two groups with one misplaced item (copper penny) and is missing a statement.

3 points

- 20 Divide the objects into two groups: those that will be attracted to the tool and those that will NOT be attracted to the tool.

Iron nail / steel paper clips

What property causes some objects to be attracted to the tool?

Score Point: 0

This response only gives one group.

Use the following information to answer questions 29 through 32.

We use different sources of energy every day.



We use gasoline to run our cars.

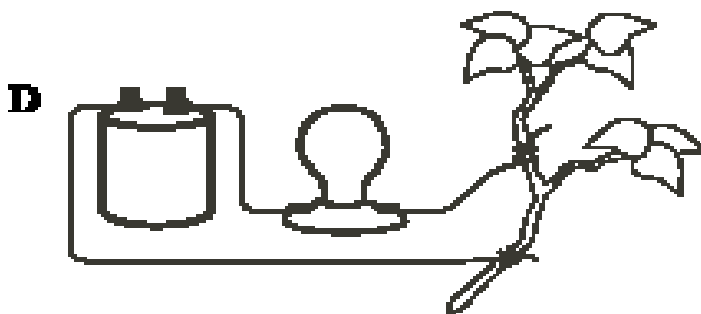
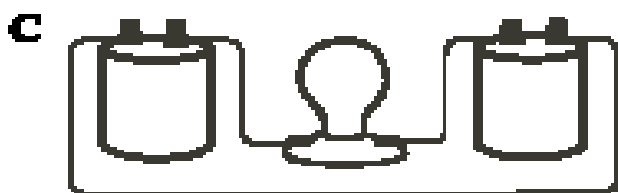
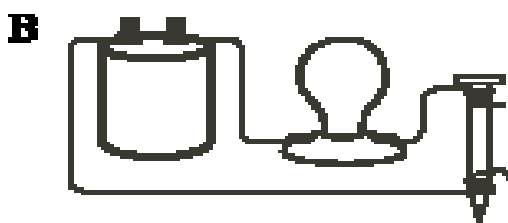


We use electricity to light our houses and wood-burning stoves to keep our houses warm.

**29** School buses run on gasoline. Which of these is the main source of gasoline?

- A** water from a well
- B** coal from a mine
- C** uranium from a mine
- D** oil from a well

30 Which electric circuit will **NOT** cause the bulb to light?



- 31** Which of the following is an example of an electrical shock hazard?
- A** an unplugged electrical cord
  - B** a dead battery from an old watch
  - C** a broken solar panel with sharp edges
  - D** an electrical cord with exposed wires
- 32** Zachary's son, Tony, is making a chart for science class. The chart will show various ways that individuals and communities use water. Name four different ways that people use water.

**ANSWER THIS ITEM IN YOUR ANSWER FOLDER. NOTHING WRITTEN IN THE SPACE BELOW WILL BE SCORED.**

**MEAP Grade 5 Science Winter 2003****#32 Constructed Response Scoring Rubric**

**Tony is making a chart for science class. The chart will show various ways that individuals and communities use water. Name at least four ways that people use water.**

**Acceptable Responses:**

Thirst quenching – to drink, to live, to make drinks, to give pets/animals  
Personal Hygiene – bathing, showering, brushing teeth  
Cooling – making ice, radiators in cars  
Manufacturing – to make things/stuff  
Sanitation – going to the bathroom/toilet  
Cleaning – laundry, washing dishes  
Cooking  
Recreation  
Irrigation – water plants  
Electric power/energy  
Dam to produce power  
Mill/waterwheel – mechanical power  
Food source – fish  
Transportation

**Scoring Guide:**

- 3 points = provides four acceptable uses.
- 2 points = provides three acceptable uses.
- 1 point = provides two acceptable uses.
- 0 points = one correct response or an incorrect response.

3 points

- 32 Zachary's son, Tony, is making a chart for science class. The chart will show various ways that individuals and communities use water. Name **four** different ways that people use water.

They use it as a food source  
they also use it to water  
plants. To swim in and to  
wash things.

**Score Point: 3**

This response provides four acceptable responses: 1) food source, 2) irrigation (water plants), 3) recreation (swim in), and 4) cleaning (to wash things).



3 points

- 32** Zachary's son, Tony, is making a chart for science class. The chart will show various ways that individuals and communities use water. Name **four** different ways that people use water.

① Swimming ② drinking ③ water parks ④ baths

**Score Point: 2**

This response provides three acceptable responses: 1) recreation (swimming, water parks), 2) drinking, and 3) personal hygiene (baths).

3 points

- 32 Zachary's son, Tony, is making a chart for science class. The chart will show various ways that individuals and communities use water. Name **four** different ways that people use water.

Faucets, hoses, squirt guns and toilets.

**Score Point: 1**

This response provides two acceptable responses: 1) recreation (squirt guns), and 2) sanitation (toilets). (Faucets, hoses) is too vague to receive credit because the use of the water is not given.

3 points

- 32 Zachary's son, Tony, is making a chart for science class. The chart will show various ways that individuals and communities use water. Name **four** different ways that people use water.

Use water of one half on a  
different side then the other  
side of what Toni have  
to do.

Scorepoint: 0

This response demonstrates no understanding of the item being tested.

**38** Many earth materials are used to make other products. Which of the pairs below shows a correct progression from earth material to new product?

**A** ore → glass

**B** gravel → concrete

**C** oil → water

**D** salt → asphalt